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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,489	03/15/2001	Uk-Jin Kang	678-604(P9457)	5670

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EXAMINER
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CHEN, ALAN S

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/809,489	<b>Applicant(s)</b> KANG ET AL	
	<b>Examiner</b> Alan S. Chen	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments to the prior art, with respect to claims 1-8, have been considered but are moot in view of the new ground(s) of rejection.
2. In light of the amendments made to the independent claims, the 35 USC 112 rejection has been withdrawn.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat. No. 6,542,497 to Curry et al. (Curry).
5. Per claims 1, 2, 4 and 5 Curry discloses a user programming system/method (Fig. 1 is a system with PBX in Wireless gateway system, element 5) for a PBX (Fig. 1, element 5, details shown in Fig. 2), the system comprising: a connection board located at the PBX (Fig. 2, element 69 has the connections board; Fig. 3 details element 69, e.g., T1/LAN/ISDN card all show connection of some form to the Internet) with a unique Internet Protocol address (at minimum, T1 card connection to ISP/Router must have an IP address) and connected to an Internet (Fig. 1, element 31), and a web server (Fig. 1, element 33 is the home register database which determines how/where to route a call between the caller, Fig. 1, element 1 and a another person (Column 9,

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lines 65+) being coupled to a remote client (various clients throughout the system shown in Fig. 1, interact with the server, element 33; the HLR server for instance services the DNS server element 51 which must interact with the HLR server, element 33, in order to properly route communications to the appropriate locations; more specifically with regard with the PBX, the handset, elements 1, connected to the PBX are the direct clients because the HLR server ultimately determines how to route calls made from these handsets, Column 10, lines 65+), the web server connected to the PBX through the Internet (Fig. 1, element 5 and element 33 are connected through the Internet, element 31), for managing a database (HLR database in Fig. 1, element 33) of a user program for the PBX (user program for PBX is programming on server that facilitates how to route calls from handsets on the PBX, column 10, lines 65+); the web server authorizes the remote client to update a database through a predetermined authentication procedure (Column 10, lines 60+, PBX system, element 5 communicates with HLR server to verify authorization) and uploads the database upon receipt of an upload request for the database from the client (after verification, the HLR database is updated/uploaded with handset, e.g., the remote client, information as stated in Column 11, lines 1+, "HLR database 33 also records the identity of the system 5 currently registering the handset 1"; the destination site would be the (wireless gateway system, element 5).

6. Per claims 3, Curry discloses using an Internet Protocol, where IP is a point to point protocol (TCP/IP, broadly used for the Internet is a point to point protocol, having a source and destination addresses in the packet, etc.).

7. Per claims 6, 7 and 8, Curry discloses the limitations of claims 1 and 4, wherein the handset communication over PBX and Internet is by definition is a man machine

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communication, e.g., routing voice over a digital computer network. The updated HLR data is also effectively transferring to the PBX, since the PBX system will know how to route calls made from the handset (element 1).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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11. Claims 1-8 are rejected under 35 USC 103(a) as being unpatentable over Shiran et al. (Shiran) in view of Curry.

12. Per claims 1 and 4, Shiran discloses a PBX, element 12, its LAN connection board, element 74 (e.g., conventional LAN circuit provided by HICOM switches), a unique IP address (software drivers for 74 and provision of TCP/IP protocol, thereby providing a unique IP address) and a connection to the internet, element 28 via elements 14, 18 and 24 which, by definition, meet the broadly stated routing means as disclosed in the applicant specification. A web server is seen at communications server, element 14 as it has a built in proxy server, element 50 with HTTP server, element 52 that allows remote clients, elements 22-26, 32 to manage a database in administrator, element 108 (column 7, lines 6-27 to include database configuration like authorized users, client names, passwords and the like), as managing is very broad to include things like accessing switch applications (column 2) or the ability to allow remote users to access the switch using a commercially available web browser, in order to manage connectivity between software applications residing on the telecom switch and network applications residing on the remote clients. The problems of the related art switch configuration are thus overcome (column 1, lines 22-42) by being able to have user-friendly interface to telecom switch software, such as configuration software and databases via remote and concurrent application sessions. The web server is connected to the PBX and Internet per Figs. 1 and 2 (e.g., via a LAN board). A remote client, element 26, is connected to the same Internet, element 28, with a predetermined authentication procedure, supra, so that the remote clients can update a database on element 14 at element 108 via the database import/export, which entails at least a request to upload/download

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database information to/from the destination sites at the server, element 14, and the clients, element 26 (per claim 4).

Shiran does not disclose expressly the connection of the PBX, element 12 to the web server, element 14, through the Internet, rather disclosing a LAN link such that the link to the web server is local. Note, Shiran does have the much of the fundamental prerequisites for connecting directly to the Internet, e.g., it has a protocol stack with TCP/IP and network hardware (Fig. 2, element 74).

Curry discloses a PBX (Fig. 2) having the ability to connect directly to the Internet (Fig. 2, element 69 shows the PBX having requisite hardware/software components that enable PBX to communicate directly with the Internet; Fig. 3A shows the PBX system, specifically the Packet Service Gateway component having an Internet/LAN card) to a variety of different type of servers that communicate with the PBX over the Internet (Fig. 1, element 5 is the PBX system, the PBX communicating with various web servers, e.g., DNS, HLR Database server etc.). Curry further discloses the web servers being able to manage a database that is used by the PBX for routing calls (Column 9, lines 69+).

Shiran and Curry are analogous art because they are from the same field of endeavor in network control of a PBX via web servers.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the PBX of Shiran, element 12, communicate with the web server, element 14, directly through the Internet.

The suggestion/motivation for doing so would have been the ability to control the PBX over a far greater distance than what would have been allowed with just a LAN connection.

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Curry shows that PBXs clearly having the capable to be directly connected to the larger Internet network (Figs 1 and 2; Column 11, lines 50+) with various web servers. The Internet is simply a larger network than a local area network, e.g., comprising many subsets of local area networks. To move from one LAN to the Internet merely require some additional software and a more globally unique address, which Curry clearly shows PBX systems are capable of having.

Therefore, it would have been obvious to combine Shiran with Curry for the benefit of delocalizing the web server connection to the PBX for more modular and flexible control of the PBX.

13. Per claim 2, Shiran combined with Curry discloses claim 1, wherein Shiran further discloses the use of HTTP server, element 52 that can run JAVA servlets, element 63, to permit JAVA based web browsers on the remote computers, elements 22, 26, to easily access switch applications and services in which JAVA applets can be transferred to the clients to allow remote users to enter data, and ultimately the export and input of database information (column 7, 108 administrator component), thereby anticipating both the upload and download of database information via the remote accessing of administrator component, element 108, by a remote client. The predetermined authorization procedure is discussed in detail by, for example, the login routine, element 102.

14. Per claim 3, Shiran combined with Curry discloses claim 1, wherein Shiran further discloses the IP of Point to Point is anticipated by the user of sockets, client server session control, modem connection, element 30, and single point entry.

15. Per claims 5 and 6, Shiran combined with Curry discloses claim 4, wherein Shiran further discloses the PBX is a key phone system, and the above discussion shows a LAN connection



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board, element 74, connected to the Internet, element 28, via routing due to intermediate connection of server, element 14, intranet, element 18 and firewall, element 24. While PCMMC is not addressed verbatim, such is addressed as per applicants' definition of PCMMC to include storing data corresponding to a particular input function code, which is anticipated by database configuration of column 7.

16. Per claims 7 and 8, Shiran combined with Curry discloses claims 1 and 4, Shiran further disclosing at least a message is sent to/from the PBX/WEB SERVER/CLIENTS by activating a web browser via HTTP server, element 52, on server, element 14, and the providing of a web page at proxy server, element 50 (column 3, lines 32-48), the requesting of access to the web server by a client per columns 3-4 by TCP/IP in order to perform a PCMMC, supra, authentication via, element 102, connecting a remote client, element 26, to the database in element 108 per column 7, updating the database and storing such via the database import/export, and finally uploading any changes to the PBX, element 12, by the web server, element 14, via the LAN, element 16, to the ADP, element 70, which is a file server on switch, element 12, that provides file management services to include database management services for the local switch.

### *Conclusion*

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 8:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASC  
01/11/2006

  
**KIM HUYNH**  
**PRIMARY EXAMINER**

1/13/06